

clarification as to their meaning. Some of the terms used to suggest translation, as Examiner has suggested.

The disclosure has been further amended to delete the embedded hyperlink in accordance with MPEP § 608.01.

Agent for Applicant requests that the following amendments be made to the specification without adding any new subject matter. The additions thereto are underlined, while the deletions therefrom are contained in square brackets.

Paragraph 2, Page 1

In a known television lottery game "Russkoje Loto", a game set of N=90 information elements is designated as a set of integers from 1 to 90, and registered lottery tickets [carrying on] bearing an information bar with [an individual, for every ticket,] a gambling combination of 30 information elements of the game set particular to each ticket, are sold to players prior to the drawing [process takes place]. The aforementioned gambling combination is compiled in 6 lines each containing 5 elements, and these lines are divided into 2 groups each containing 3 lines. During TV-broadcast of the prize-drawing process, [in which] under computer supervision, only sold tickets are taken into consideration, and a game operator chooses successively and randomly numbers from the game set and [informs of them] communicates these numbers to the players who compare the chosen information elements - numbers with the numbers of the information bar [carried] on their tickets, and mark in [the code] a section of the ticket that includes the gameset those numbers [coinciding] that coincide with the chosen numbers, should the coincidence occur[s]. The winning tickets are determined during several rounds of the prize fund drawing process: the first round winner is a ticket in which all 5 elements of any line are marked [earlier than] before in any other tickets, the second round winner is a ticket in which all

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15 elements of one of the groups are marked earlier than in other tickets, the third and subsequent round winner is a ticket in which all 30 numbers of the gambling combination are marked [earlier than] before in any other tickets [(see, Internet URL <http://www.rusloto.ru>)]. See the publicly available rules for "Rusloto".

Paragraph 3, Page 1

In much the same way as in "Russkoje Loto", a prize fund drawing process is the basis for a known lottery game "Bingo" and its TV-versions [(see, Internet URL <http://www.dux.ru/enpp/tv/bingo/rules.htm>)].

Paragraph 1, Page 2

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A known Russian lottery game "Sportloto" comprises (i) designation of the game set as a table of N=45 information elements – integers from 1 to 45 (a "6 of 45" version) or a table of N=36 information elements – integers from 1 to 36 (a "5 of 36" version), (ii) distribution, among potential players, of lottery coupons [carrying the] bearing game set [on them] in a form of [the indicated] tables and also [a unique, for every coupon,] identification data, unique to each lottery coupon; (iii) entering by each player in the game set table of the lottery coupon [of] 6 marks about the wagers on 6 intentional information elements of the game set for the "6 of 45" version and 5 marks for the "5 of 36" version[.]; (iv) return of the coupons with the marks about the wagers on them to the game organizer by a fixed time[.]; (v) registration of the returned coupons with the wager marks on them and a wager drawing at a predetermined TV-broadcast time in a process of random [choosing] selection of a combination of winning elements from the game set, while indicating the money awards depending on the number of right guessed elements in the winning combination (Russian Federation Patent No. 2,023,307, 1994, G07C 15/00).

Paragraph 3, Page 2

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Another drawback with the "Sportloto" lottery consists in the [organization] complexity of [its] running the

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lottery, due to the necessity [to] of [produce] producing a large number of lottery coupons, their sale to the population, [mail] mailing of marked coupons back over large distances, sorting of received coupons by draws, recognition of hand-written characters, and all that has to be done [at extra] with increased risks of fraud client [coupons] distribution of coupons and/or fraud [actions of some] by the considerable number of employees [among the considerable number of those] involved in this process.

Paragraph 1, Page 3

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terminals transmitting via telephone networks to a host computer signals with information on sold coupons and their wager marks (for example US Patent No. 5,186,463, 1993, A63F 3/06). Analogous technical means are used in a Russian electronic lottery "Lotto Million" with weekly prize-drawings through a national Russian TV channel.

Paragraph 2, Page 3

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To simplify the process of lottery running and, in particular to reduce a volume paper documents processed, a computerized telephone game system has been invented on the basis of a touch-tone telephone set and a host computer, which by means of ramified algorithm and a set of various prerecorded voice messages provides callers with: (i) registration as game players identified by personal identification numbers (PINs), (ii) game credits purchase via credit cards, (iii) wager [enter] entry and registration of virtual game coupons associated with the wagers (US Patent No. 5,415,416, 1995, A63F 9/22). This technical solution also provides for the integration of the host computer with a caller's phone number identification unit and a billing software for charging the identified phone numbers, which makes the system accessible to players without credit cards. In accordance with [the] patent specification, the system is designed for running lotteries with registration of combinations of numbers selected from predetermined sets of numbers as

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wagers until the beginning of the prize-drawing process by means of random choosing the winning combinations by the game organizer; in so doing, on players' request the system itself can randomly wager on behalf of the player.

Paragraph 5, Page 3

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Paragraph 1, Page 4

The closest prior art with respect to the subject matter of the present invention has been described in a wagering game method implemented in the Canadian state lottery "6 of 49", which enables participation (apart from buyers of lottery coupons at remote electronic terminals) to any user of the international computer network Internet having at least one of the worldwide accepted credit cards for paying his or her wagers and receiving possible wins [(Internet resource) [\[http://www.cimtd.com/lotto\]](http://www.cimtd.com/lotto)]. In this game, the game set of  $N=49$  elements is designated in a central game computer as a set of  $N$  non-repeating information codes each being the binary code of one of the integers from 1 to 49. Everyone who wishes to participate in the game, via the Internet telecommunication lines on his or her personal computer, receives signals carrying information about the players' registration form and possible versions of charging the wager costs. Filled-in registration forms with marked payment options are returned as a set of signals through the Internet channels to the central computer and, when verified, recorded to the long-term memory for further identification of players and charging of wager costs. Thereupon, signals carrying information about the game set elements and also information about scheduled game rounds in which the wager drawing will be run, are transmitted from the central game computer to the personal computer of a registered player. From this information, every player chooses a combination of 6 elements as his or her wagers and, before the next round begins, transmits via the Internet channels to the central game computer signals

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identifying the given player and carrying information about his or her wagers. In the host computer, signals received from the players are identified, registered and memorized while charging the players who have sent the signals. When it is time to begin the next game round, registration of signals with wagers for that round ceases and the game organizer chooses randomly from the game set 6 elements which will make up a winning combination. Thereupon, the recorded signals with wager information are compared with the information codes of the winning combination, which results in the recognition of signals containing information about 4 and more wagers of the winning combination and identification of players who have placed those wagers and among whom the prize fund, as part of the total game round budget collected from the payment of wagers, is allocated in accordance with the game regulations.

Please delete pages 5-10 of the disclosure and insert the following:

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The present invention consists of an apparatus and a method for enabling multiple users to engage in iterative-analytical wagers.

The invention provides a gaming method comprising the steps of: (i) defining a game set consisting of a plurality of information elements; (ii) establishing a series of wager selection rules defining the selection of a winning wager based on the plurality of information elements, the wager selection rules including preconditions for a wager drawing and based on a quantitative wager distribution among the information elements, rule of defining the winning wager (s) at the end of each round, (iii) receiving and registering wagers from a plurality of players (at any given time only one wager from one player), wherein the wagers correspond to the plurality of information elements.

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the wagers registered define cumulatively a quantitative wager distribution; and (iv) iteratively processing and analyzing the successive quantitative wager distributions to establish whether the preconditions for the wager drawing end have been achieved. (v) terminating the game round in case the preconditions are achieved and (vi) starting the next game round at the time of registering the first wager after the previous round was terminated. (vii) wherein the wager receiving, registering and processing is hidden for the period of round duration.

Other aspects of the invention include modifications of the method described above, including to provide the "Force of Zero", "Force of Minimum", and "Force of Minimax" iterations of the method described below. These modifications are particularized in the description.

The present invention also includes a series of particular methods for implementing the gaming method described above in the context of particular hardware devices that enable wagers to be placed by the plurality of users, and the wagers to be registered and processed by the game administrator.

The present invention also includes a series of circuits that implement the methods described herein.

Paragraph 1, Page 11

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[connected to outputs of the gates (25) and (28-1), a second "exclusive OR" gate (28-2) with N inputs each coupled to the output of the corresponding maximum-comparison unit (32), a second "logical AND" gate (29-2) with two inputs connected to outputs of the gates (29-1) and (28-2), a first encoder (30-1) with N inputs each coupled to the output of the corresponding minimum-comparison unit (31), a second encoder (30-2) with N inputs each coupled to the output of the corresponding maximum-comparison unit (32), a minimum-counter (33) coupled to the output of the gate (29-1), the said minimum-counter (33) being connected

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with its output to the input of each of minimum-comparison units (31), and a maximum-counter (34) coupled to the output of the gate (28-2), the said maximum-counter (34) being connected with its output to the input of each of maximum-comparison units (32), the said gate (29-2) being connected with its output to reset inputs of the counters (23), (33), (34), the said gate (29-1) being connected with its output to a control input of the first encoder (30-1), the said gate (28-2) being connected with its output to a control input of the second encoder (30-2).]

Paragraph 2, Page 12

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The present invention consists of an apparatus and a method for enabling multiple users to engage in iterative-analytical wagers. The term "iterative-analytical" is a technical term of art well known to individuals familiar with probability calculations, and also individuals familiar with this aspect of computer programming. Iterative-analytical calculations are used where because of the existence of independent variables only an approximate formula exists for calculating the independent variables. The independent variables therefore are calculated iteratively, and these calculations are analyzed so as to define dependent variables. These dependent variables enable the calculation of the independent variables.

Aspects of iterative-analytical processing are applied to placement of wagers in order to provide the present invention.

The present invention is best understood as a gaming method, and specifically one comprising the steps of:

1. defining a game set consisting of a plurality of information elements;
2. establishing a series of wager selection rules defining the selection of a winning wager based on the plurality of information elements, the wager selection rules including preconditions for a wager

drawing end based on a quantitative wager distribution among the information elements, and rules for defining the winning wager or wagers at the end of each wager round

3. receiving and registering one or more wagers from one or more players, whereby the wagers correspond to the plurality of information elements, and the wagers registered define cumulatively a quantitative wager distribution;
4. iteratively processing and analyzing the successive quantitative wager distributions to establish whether the preconditions for the wager drawing end have been achieved, and
5. terminating the wager round where wager selection rules indicate a wager drawing end.

Where there are multiple wager rounds in a game, the method further comprises the step of starting the next wager round at the time of registering the first wager after the previous wager round was terminated.

In another aspect of the method of the invention, the wager receiving, registering and processing as described above is hidden during the applicable wager.

The information elements, as is obvious to anybody skilled in the art, can be provided as a series of graphic elements in a particular user interface, for example, blocks in a gaming screen. Each wager corresponds to a particular block. The quantitative wager distribution, in one illustrative example of the present invention, consists of a particular pattern of the blocks in the screen. The wager drawing end is achieved when the particular pattern meets the preconditions for wager drawing end. As described below, various user interfaces for enabling users to practice the gaming method of the present invention are contemplated.



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Other aspects of the invention include modifications of the method described above, including to provide the "Force of Zero", "Force of Minimum", and "Force of Minimax" iterations of the method described below. These modifications are particularized in the description. These terms also refer to terms well known to those skilled in the art of lottery games. These terms have the following well-known meanings that are also provided for below:

- "Force of Zero" is the name of a particular game, which ends when all areas of the gaming screen are occupied with the blocks, in a particular illustration of the present invention. In this game, the ending block wins the game. In a simpler description, the aim of this game is to occupy the last empty block left on the game board.

- "Force of Minimum" is the name of a particular game, which ends when all areas of a gaming screen are occupied with the blocks AND, for example, there is only one cell (sub-division of the gaming screen) with a minimum number of bricks (for example, equal to 1) placed on it. The only brick placed on the "minimum" cell wins the game.

- "Force of Minimax" is the name of a particular game, which ends when all cells are occupied with the bricks AND there is only one cell with a minimum number of bricks placed on it AND there is only one cell with a maximum number of bricks placed on it.

The present invention also includes a series of particular methods for implementing the gaming method described above in the context of particular hardware devices that enable wagers to be placed by the plurality of users, and the wagers to be registered and processed by the game administrator. These aspects of the present invention are particularized below.

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Paragraph 4, Page 12

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The present invention also includes a series of circuits that implement the methods described herein, as detailed below.

[A function circuit] A representative circuit is illustrated in Fig. 1 of a wagering game apparatus set forth in FIG. 1 comprises a game set forming unit (1) (the said set consisting of  $N > 1$  game elements) which is connected, via a data dissemination unit (2), to an input/output processor (3). [An] The information output of the processor (3) is connected to a recognition and identification unit (4), a wager payment unit (5), a wager registration unit (6), a controller (7), a playing-logic unit (8), and a recording unit (9) which are connected in series. A playing-round counter (10) known device for counting game rounds (also referred to as "wager rounds" in this disclosure as each game round is actually a wager round) is connected [to the second] preferably to an input of the wager registration unit (6) and to [the second] an output of the controller (7) interconnected (here and throughout the text the term "interconnected" is to be understood as the availability of communication lines for data exchange) with the game set forming unit (1). The [second] output of the wager registration unit (6) is connected, via a wager registration confirmation unit (12), to the processor (3).

Paragraph 5, Page 12

An output of the game set forming unit (1) is also connected to [a third] an input of the controller (7) and to [a] the wager generator (13) interconnected with the recognition and identification unit (4). A long-term memory unit (14) is interconnected with the following [units] elements: the recognition and identification unit (4), the wager payment unit (5), a payment registration unit (15), an outcome review unit (16) which in turn is interconnected with the processor (3) and connected to the output of the recognition and identification unit (4), the latter being connected with its other output to an

Input of the payment registration unit (15) interconnected with the input/output processor (3).  
Outputs of the

Synchronization of the apparatus operation is ensured by introduction of a timer (17) (a known device) and its connection to units and elements requiring synchronization (not shown in FIG. 1). Moreover, an output of the timer (17) is connected to the controller (7), the recognition and identification unit (4), the wager payment unit (5), and the recording unit (9).

Provision of the players, on their request, with information about a current wager distribution among the game set elements is carried out by a wager drawing display unit (18) preferably coupled between an additional output of the controller (7) and an additional input of the input/output processor (3).

Return to the players, on their request, of wagers from unfinished playing rounds is carried out by a wager returning unit (19) interconnected with the controller (7) and the long-term memory unit (14), and also coupled between the recognition and identification unit (4) and the input/output processor (3) [(these two connections are shown in FIG. 1 with a dotted line)].

The game starts [with forming] by the game organizer defining a game set consisting of  $N > 1$  information elements by entering from a [console via a known program interface to a [the electronic] memory device] [of a] via the game set forming unit (1) [of]  $N$  non-repeating information codes, each corresponding to one of the game set elements. Information codes of the game set elements are transferred to [a] the data dissemination unit (2) where they are converted into a message format [about] that includes the game set contents and invitation to wager, and the said invitation [enters a] is processed by the processor (3).

[An] The input/output processor (3) converts received the internal signals of the apparatus into signals to be

Paragraph 2, Page 13

Paragraph 3, Page 13

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Paragraph 7, Page 13

Paragraph 8, Page 13

Paragraph 1, Page 14

transmitted through external communication lines, and transmits these signals to registration-playing terminals (not shown in the Figure) of registered and potential players through external communication channels (not shown in the Figure) which may be computer interface lines, analog and digital telephone channels, communication links of local and global computer networks and on-line services, asynchronous communication links of cable TV networks, etc. Signals received from registration-playing terminals through external communication channels are converted by the input/output processor (3) into signals suitable by types and formats for dissemination and processing by functional units of the apparatus. Any type of computerized device may be used as a registration-playing terminal including a cell phone.

At the stage of [forming] defining a game set, the processor (3) converts a message about the game set contents received from the data dissemination unit (2) into data communication signals in accordance with known standards and protocols [accepted in] defined by the communication [links and] networks used by the registration-playing terminal, and then sends these signals through communication channels to registration-playing terminals at a preset repetition frequency and/or on their requests.

The game set forming unit (1) may be [used in a form] implemented as of a known computer terminal with a console and main memory, for example a personal computer; the data dissemination unit (2) may be [made] implemented as a

dedicated main memory array of [this] the computer terminal under control of a special program; the input/output processor (3), depending upon types of applied interfaces, communication channels and networks, may be [used in a form of] implemented as serial and parallel computer ports, network interface

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[Paragraph 2, Page 14]

boards, modems and modem pools, controllers and adapters of integrated-service digital tel phone networks (ISDN), controllers of asynchronous cable TV networks, specialized telecommunication processors, Internet-protocol converters [- jointly with relevant hardware-software drivers] all in a manner that is known.

[A] The registration-playing terminal is used for registration of the players and, input of wager data and output of drawing outcomes. These functions may be performed by touch-tone telephone sets, electronic terminals [of points of sales] for sale of lottery coupons; terminals for servicing credit cards, bank['s] cards and [also] smart-cards, including automatic teller machines, discount card service terminals, video-terminals of asynchronous cable networks[.]; personal computers of users of corporate global computer networks; [and] an on-line service[s] provided by a web server, accessed through a browser, etc. A particular case of a registration-playing terminal is a pulse-dial telephone set whose application in conjunction with the presently disclosed apparatus [will be set forth separately] is particularized separately below.

[Paragraph 3, Page 14]

Having received signals about game set contents and game regulations from the processor (3) [to] at the registration-playing terminal, an operator of the registration-playing terminal selects one of the following three modes of interaction with the apparatus proposed by the data dissemination unit (2): (i) payment registration mode, (ii) outcome review mode or (iii) wager placement mode[.]. [while sending] A corresponding signal is sent through feedback channels to the processor (3). Signals received through feedback channels are transferred, following conversion of types and formats[.] in a manner that is known by the input/output processor (3) to the recognition and identification unit (4). [which first of all]

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[Paragraph 4, Page 14]

The recognition and identification unit (4) adds [an indication of a system timer (17) to] adds a timing identifier to the format of this signal and recognizes one of the aforementioned three modes of the apparatus [- registration-playing terminal interaction] and adds same to the format also.

The payment registration mode [providing] generally provides, [as a rule,] a pre-registration routine whereby [of] personal data of players and their [consent with] confirmation of access codes [to] for this mode are defined, [for the purposes of] This is to [safeguarding] safeguard against unauthorized access, depending upon the type of registration-playing terminal used and the mode of wager payment[.], [may be realized differently.] Various other tools and methods for maintaining security may be used. [In case where] Where the registration-playing terminal [is used in] consists of a form of municipal or corporate network or a cable network video-terminal then, under preliminary agreement between the game authority and network authority, for example personal data of a subscriber may be transferred from the subscribers' database to the processor (3) for registration as a player[.]; [in] In so doing, the mode of wager and prize payment may be selected either the same as in the case of network service payment, or using credit cards, or in accordance with a discount-bonus system (see below). [In case where] Where the registration-playing terminal [is used in a form] consists of a terminal for servicing credit, [bank's] bank or smart cards, then all the [player's] player data necessary for registration of payments may be read[-] out directly from the card[; in] In the case of a smart card – [including the sum of balance of virtual money in the] a sum of virtual money may be deduced from the electronic circuit of the card, provided that the same card will be used as payment means during the

Paragraph 1, Page 15

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game. If the game organizer is a discount system authority and the registration-playing terminal [is used in a form] consists of a terminal for servicing discount cards, then registration of a player may be made on the basis of existing registration data [of a] for the discount program participant, while effecting payments in accordance with a discount-bonus system. If the game organizer is a corporate computer network or on-line service authority, for example [the] an Internet[-network] service provider, then registration of a player may be made on the basis of existing registration data [of a] for the corporate network or on-line service user, while effecting payments for participation in the game in accordance with a discount-bonus system and/or pre-agreed scheme of service payment. If the game organizer [is an Internet-network server holder] operates a web server, then the players fill in a registration form transferred from the [processor (3)] web server to their personal computers, while choosing as a payment means one of credit cards acceptable to the game organizer. Finally, if the registration-playing terminal [is used in a form] consists of an electronic terminal [of the point of sales] sale of lottery coupons, then the registration data is used as a unique alphanumeric code of a coupon which [takes the place of personal data of a player] is used as a unique identifier for the player, whereas payment for a wager is charged directly by [an] the operator of the registration-playing terminal, and a payment registration mode is combined with a wager distribution mode. [A type of the registration-playing terminal used is determined by the processor (3) using one of the known methods in the course of connection installation] Each of these representative implementations is provided in a manner that is known.

Paragraph 2, Page 15

In any case, after the recognition and identification unit (4) has recognized the payment registration mode,

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signals received through feedback channels from the registration-playing terminal, said signals containing address data of the players, personal codes of access to an account-register and payment[s] data (if applicable), are converted in the processor (3) from [formats of] external communication signals [through external lines] into an internal signal format used in the apparatus, and [entered a] stored to the long-term memory unit (14). [via a] A payment registration unit (15) [which carries on a dialog with] establishes a communication session with a particular registration-playing terminal via the processor (3) [and a connection established through communication channels]. In so doing, the payment registration unit (15) preferably assigns a database identifier [personal address] to every new player and, using this [address] identifier, introduces personal identification data of the player with an access code in the long-term memory unit (14) and opens a personal playing account[-register of] for the player. In the course of a primary registration of the player, the balance of his or her account[-register] is supplemented with an initial amount of monetary units used to measure the cost of wagers in case of conducting games with wagers of different price (for example, the game organizer may change a wager price depending upon the power of the game set N) and possibly with non-monetary forms of payment.

Paragraph 3, Page 15

[One of possible] Possible non-monetary forms of payment for [the] participation in the game includes [is] a discount-bonus system widely used in discount programs, where for each purchase of a [good] product or service a personal account of the program participant is [supplemented] credited with a certain amount of bonus points [to be determined by] based on the money price of the purchase[;], [subsequently] Subsequently, said points may be



Paragraph 1, Page 16

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Paragraph 2, Page 16

Paragraph 3, Page 16

[exchanged] redeemed for [new goods] additional product and/or services or used to receive certain discounts. [It is naturally to use a discount-bonus scheme in those games organized by a discount program authority (see Example 7, below), however a similar scheme] Similar implementations may be applied in cases of mass distribution of the games described with wagers being placed via by authorities [of] telephone networks, [and] asynchronous TV networks, corporate networks and on-line services. [In all these and similar cases, payment of wagers and prizes may be measured by certain quanta of services to be provided (see Examples 2, 4, 6, below)].

From here on, the player may change the amount of a personal playing balance repeatedly, while choosing again the payment registration mode and interacting with his or her playing account[-register] from the registration-playing terminal through communication [channels] network, the input/output processor (3) and the payment registration unit (15) in order to enter new payment units to the playing account[-register] or withdraw [them] such units from the account-register, for [use beyond] example for application of such unit outside the game. As a matter of fact, the structure of the player identification data [of the player], and payment mode [and payment equivalent] are determined by the game organizer and fixed in the registration of the player; subsequently, this data may be defined more accurately as needed in the payment registration mode described above.

In [the] an outcome review mode of the, an outcome review unit (16) via the processor (3) and communication networks [channels] carries on a dialog with registered and potential players, while providing them with information about an outcome of completed playing rounds from the long-term memory unit (14).

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[If the] The player may select a [chooses the] wager placement mode of the present invention [, in] In response, [to the aforementioned message of] the data dissemination unit (2) [containing] provides an invitation to wager[,]; the player inputs his or her identification data in the [proposed] form of a virtual playing coupon[,]; the player indicates in this form a wager placed by him or her in which is reflected by the form as [a form of] an information code of a corresponding game set element; [and] the player sends this form as a communication signal of [certain type and format] through known communication feedback channels provided for this purpose to the input/output processor (3). [A] The signal is received and converted by the processor (3) which signal is recognized by the recognition and identification unit (4) as a signal containing a [players'] player's data and wager information code[,]; [thereupon] Thereupon the recognition and identification unit (4) identifies the player when interacting with the long-term memory unit (14) while finding [there] his or her database [address] identifier and checking the state of a personal account-register.

Paragraph 5, Page 16

[An important] A feature of identification in accordance [associated] with the [specific nature of] the game method of the present invention is the fact that in case of failure to identify the player, the recognition and identification unit (4) transfers a received signal to the long-term memory unit (14) thereby freeing itself for the identification of the next signal, and the unit [(14)] (4) is preset via the payment registration unit (15) and the processor (3) through the communication session [channels of dialog] with the registration-playing terminal so as to obtain [a] more precise [definition of] identification data [of] for the player and/or entering of additional payments to his or her personal account-register.

Paragraph 6, Page 16

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Paragraph 1, Page 17

In order that the players [could realize a possibility not to wager by themselves but to] might entrust the apparatus to wager for them [with this duty], the player with the help of the registration-playing terminal inputs, in a

wager field [of the signal sent] provided by the apparatus of the present invention in the wager placement mode, a special wager inquiry code is provided which, following a successful signal identification, is interpreted by the recognition and identification unit (4) as a wager placement code without participation of the player[:]. [as] As a result, the recognition and identification unit (4) sends an inquiry for a wager to a wager generation unit (13) and, after having received from the wager generation unit (13) a wager in [a] the form of an Information code of a corresponding game set element, substitutes [with this] the information code for a special wager inquiry code in the identified signal. The wager generation unit (13) [may be realized] is provided in a manner that is known based on the [basis of] one of the methods of pseudo-random-integer generation known in the computer science.

Paragraph 2, Page 17

In case of a successful completion of identification, a signal with a wager is transferred from the recognition and identification unit (4) to [a] the wager payment unit (5) which, while interacting with a [personal] player account[-register] of an identified player in the long-term memory unit (14), generates for the player account[-register] a message about [one] the debit corresponding with the wager price's [write-off], while sending this message to the long-term memory unit (14) to correct [a] the balance of the identified player account[-register].

Paragraph 3, Page 17

Prior to the balance correction, the long-term memory unit (14) may inquire, (via the payment registration unit (15), the input/output processor (3), communication

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[channels] network and the registration-playing terminal], from the player [about an] for the access code to his or her player account[-register] if such inquiry is [provided] permitted by the game regulations and/or [necessity of] such inquiry is [ndicated] authorized by the player in his or her personal registration data during registration as a player. If such inquiry about a code to access an player account[-register] is needed, a signal containing a wager is also transferred from the wager payment unit (5) to the long-term memory unit (14) in order to free the wager payment unit (5) for subsequent signals with wagers, [as it is provided for in] operation of the recognition and identification unit (4) in each case of unsuccessful identification. In case of unsuccessful confirmation of an access code, the payment registration unit (15) [carries on a dialog] establishes a communication session with a registration-playing terminal via the processor (3) to define more accurately an access code. Following confirmation of the access code, a signal containing a wager comes back to the wager payment unit (5) where its format is supplemented with data from the system timer (17) [about the current time of paying for a wager] by means of a time tag, applied in a manner that is known.

Paragraph 4, Page 17

If the player uses as a registration-playing terminal [an] known electronic [cash] terminal for purchasing of [the point of sales of] lottery coupons, a signal entering the input/output processor (3) contains a unique alphanumeric [code of identification of a] lottery coupon identifier and a wager value in a form of information code of a corresponding game set element or a special code of inquiry for a wager generation on behalf of the player. When processing such [a signal] code, the recognition and identification unit (4) jointly with the long-term memory unit (14) creates for this [signal] code a database [address] identifier of [the received

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Paragraph 2, Page 18

Paragraph 3, Page 18

Paragraph 4, Page 18

Paragraph 5, Page 18

signal], said [address] identifier being unambiguously associated with an identification code of the lottery coupon paid by the player. Based on this address, the long-term memory unit (14) forms [an] a player account[-register of] for the

As a result, in all cases a signal at the output of the wager payment unit (5) contains three completed data fields: [an account-register] a player account database [address] identifier, a wager value in a form of the information code of a game set element, and a system time tag of [a] the signal output from the wager payment unit (5).

The recognition and identification unit (4), the wager payment unit (5), the payment registration unit (15) and the outcome review unit (16) [may be realized as specialized imperative software modules located in] are generally implemented as software utilities stored to the computer memory.

The long-term memory unit (14) is a database control system and, properly speaking, a database which [are] is implemented [with the use of] using, for example, high-performance disk drives of required capacity.

[An] The output of the wager payment unit (5) enters a wager registration unit (6) where its format is supplemented with two data fields: a current round number field and a current round wager number field. To fill in these fields, the wager registration unit (6) uses readings of a playing-round counter (10) and readings of its internal counter [of] based on a number of wagers in the round which zeros every time with the change in readings of the playing-round counter (10). A full copy of [a] the signal so [registered] supplemented is transferred to a wager registration confirmation unit (12) which forms from this copy a message about a wager registration and transfers this message to the long-term memory unit (14) to input registration data of a wager in an account-register using a database

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[Paragraph 6, Page 18]

[Paragraph 7, Page 18]

[Paragraph 2, Page 19]

address indicated in the copy, and also transfers this message via the input/output processor (3) and communication [channels] network to the registration-playing terminal from which [a] the registered wager was placed. Thereupon, a registered signal is truncated by format up to a signal containing only a database identifier [address] and a wager information code and transferred to the controller (7).

In this way, a message transferred by the wager registration confirmation unit (12) to the long-term memory unit (14) and the processor (3) followed by its transfer to the registration-playing terminal contains 5 filled in data fields: a database address or identifier, a wager value, a system time [value] lag, a serial number of the current playing round and a serial number of a wager in the current playing round, wherein a signal having a greater value of system time has a greater value of a combined index "round number - wager number".

The controller (7) [serves to load] loads wagers contained in information code signals to a wager distribution processor (11), [take decisions about] determines the start and end of playing rounds and transfer data about quantitative distribution of wagers in the completed round to a playing-logic unit (8). In so doing, the controller (7) interacts with the wager distribution processor (11) which realizes an iterative-analytical process of forming a quantitative wager distribution among the game set elements.

Upon arrival of a regular information code of the wager from the controller (7), the wager distribution processor (11) carries out iteration of the code processing and updates an accumulated wager distribution while correlating this code with an information code of a corresponding game set element formed by the game set forming unit (1) and the controller (7) loaded in the game initialization into the wager distribution processor

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(11), hereby determining the number of wagers correlated with a given game set element in the current playing round, and checks by an updated quantitative wager distribution a round completion condition, while generating, at the iteration end, to the controller (7) a flag of the playing round completion in a form of 1-bit signal-flag  $F=0$  (round not completed) or  $F=1$  (round completed). With  $F=0$ , the controller loads the next signal in the buffer storage, whereas an information wager code contained in the signal – to the wager distribution processor (11). When the signal  $F=1$  comes, the controller (7) unloads from the wager distribution processor (11) data about quantitative wager distribution and about revealed special points of this distribution (last zero, absolute minimum, absolute maximum, etc.) in the round completed and transfers the results thereof to the playing-logic unit (8) along with readings of the system timer about the round completion time, simultaneously transferring to the playing-round counter (10) a command to increase the round number by 1.

Paragraph 3, Page 19

The same operations of the playing round completion are effected by the controller (7) in case of a method of iterative-analytical game with instantaneous outcome, like "Force of Zero". In this case, however, a signal bugger storage in the memory of the controller (7) may not be created, since a signal-flag  $F$  indicative of the playing round completion which is generated by the wager distribution processor (11) to the controller (7) is at the same time a winning flag in respect of the last wager processed ( $F=1$  – wager won,  $F=0$  – wager lost). For this reason, with respect to [the] a particular embodiment of a method of iterative-analytical game with instantaneous outcome in accordance with the present invention, a wager registration confirmation unit (12) provides for a delay in the generation of its signal

Paragraph 3, Page 20

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Paragraph 4, Page 20

before the completion of processing by the wager distribution processor (11) of a wager which

From the received signals with winning statuses, the recording unit (9) creates a consolidated protocol[-] or register of the completed round which contains both general data of the playing round (time of the start, time of the end, the number of wagers, numbers of elements won, the amount of a prize fund and its allocation by elements won, database addresses of wagers won and amounts of their winnings) and detailed data with respect to each wager (a database address, a wager value, a serial number in the round, a winning flag, the amount of the winnings). The recording unit (9) may also be realized on the basis of a variable-length buffer storage which under dynamic buffering conditions may use for its add-in memory resources released by the buffer storage of the controller (7) in the course of its unloading.

A consolidated [protocol]-register of the completed round is transferred to the long-term memory unit (14) for subsequent storage and presentation via the outcome review unit (16) and the processor (3) through communication [channels] networks to those who so desire. Upon arrival of this consolidated [protocol]-register, the long-term memory unit (14), in accordance with this registers protocol, corrects the player accounts[-registers of the] for players whose wagers were subject to a [drawing] draw in the completed round, wherein whether the wager originated from playing coupons or wagers from players placing bets makes no difference to the outcome [the difference between accounts-registers of natural persons and playing coupons whose wagers were introduced from registration-cash terminals, is of no importance].

Paragraph 4, Page 21

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A quantity of numbers in a telephone exchange for a game among N-[power] players set may be increased at the expense of numbers to be used for rendering



all

[Paragraph 5, Page 21]

additional services to the players. For example, (N+1) telephone number of the processor (3) may be used for receiving inquiries to generate a wager from the players, (N+2) telephone number of the processor (3) may be used for purchasing a credit to be entitled to wager, (N+3) telephone number of the processor (3) may be used for informing about results of the players in completed round for a certain period of time, (N+4) telephone number of the processor (3) may be used for returning wagers from unfinished playing rounds, etc. So, when answering a subscriber's call by the telephone number of an additional service, the processor (3) generates a signal containing a speaker's telephone number and a special code of this service. An output of the processor (3) containing a speaker's telephone number as identification data and an information code of a game set element or an additional service code which corresponds to a dialed telephone number of the input/output processor (3), is recognized and identified in the recognition and identification unit (4). In the course of signal identification, a speaker's telephone number is associated with a database address in the long-term memory unit (14) under which a [personal] player account[-register] is stored, (if any), or a speaker receives a voice message that he or [her] she is required to dial a (N+2) telephone number in order to open an account-register and purchase a minimum credit for the right to wager. After the signal containing a wager value has been identified, this signal is processed according to the above-described [scheme] method, wherein data generated by the wager registration confirmation unit (12) and transferred to the processor (3) are converted by the voice generator and distributed to a speaker in response to his or her call, and upon identification of a wager placement code without participation of a player the wager is placed by

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Paragraph 2, Page 22

a wager generator (13). Upon identification of a special playing credit purchase code, the payment registration unit (15) corrects accordingly [a] the speaker's player account[-register] balance (debit or credit) in the long-term memory unit (14) and

To implement a particular [case] embodiment of a wagering game method in accordance with the present invention which provides the players, on their request, with information about a current wager distribution among the game set elements, the basic apparatus is supplemented with a wager drawing display unit (18) coupled between an additional output of the controller (7) and an additional input of the processor (3). To obtain information about a current quantitative wager distribution among the game set elements, that is about a current wager drawing state, the player sends from his or her terminal to the processor (3) a signal carrying, along with identification data of the player, a data inquiry flag about the current drawing state. When the recognition and identification unit (4) detects in the signal received from the processor (3) an identified player's inquiry flag to information about the current drawing state, the recognition and identification unit (4) [inquires] requests [on] the wager generator (13) for a wager and supplements the signal received from the processor (3) with its value, thereupon transfers the signal so converted to the wager payment unit (5) in order to draw on an account of the identified player in the amount of one wager. Thereupon, a signal containing information about a wager placed without participation of the player is processed by other functional units; in the course of processing the signal with an inquiry flag to present information the controller (7) produces to the wager drawing display unit (18) data about quantitative wager distribution among game set elements and data about revealed special points of this distribution which are converted by the wager

drawing display unit (18) into a message format about a wager drawing current state and transfers this message to the processor (3) for communication to the player who has sent the inquiry.

Paragraph 4, Page 22

A 12

Paragraph 1, Page 23

To implement another particular [case] embodiment of a wagering game method in accordance with the present invention which enables the players to withdraw their wagers from a wager drawing process in games with a postponed outcome of the drawing, the basic apparatus is supplemented with a wager returning unit (19) coupled between the recognition and identification unit (4) and the input/output processor (3) and additionally interconnected with the controller (7) and the long-term memory unit (14) (these two connections are shown in FIG. 1 with a dotted line). To return registered wagers from an unfinished playing round, the player sends from his or her registration-playing terminal to the processor (3) a signal carrying, along with identification data of the player, a request flag for wager return. In the recognition and identification unit (4), such a signal is identified and recognized as a signal of identified player for returning his or her wagers and transferred to the wager returning unit (19) which first of all checks, with the help of the long-term memory unit (14), the availability in [an] a player account[-register] of [this] the player of data about registered wagers in the current playing round. [With a negative] If the result of the check is negative, the result of the wager return signal is ignored, whereas with a positive [check] result the wager returning unit (19) initiates data exchange with the controller (7) [providing] provides to the latter [with] a database [address of] identifier for the player who requested [for] the wager return. This address is transferred by the controller (7) via a playing-logic unit (8) to a recording unit (9) for [entering] entry in the protocol of the current playing round. The controller (7)

interrupts reception of signals with wagers from the wager registration unit (6) and changes over to interaction with a wager returning unit (19). The wager returning unit (19) receives from the long-term memory unit (14) and transfers to the controller (7) information codes of wagers placed by a given player in the current round. [Codes] Information codes of these wagers are transferred to the controller (7) in succession opposite to [that of] the registration numbers [of these] for registered wagers in the current playing round, and each [wager] information code for wagers is [supplemented] associated with a special return flag. Having received an information code [of] for the regular wager requested for return, the controller (7) transfers this code for processing by [a] the wager distribution processor (11). The wager distribution processor (11) processes a wager code received from the controller (7) in the usual fashion, except for that during correlation a wager code with the code of a corresponding game set element, a number of correlated wagers accumulated in the processor (11) is not increased by 1, but rather decreases by 1. As a result of processing the regular wager with a return flag, the wager distribution processor (11) produces, as usual, a signal-flag F indicative of the completion of wager drawing in the current round, said signal being translated by the controller (7) to the wager returning unit (19).

Paragraph 2, Page 23

Having received from the processor (11) a signal  $F=0$ , after processing of the regular wager code with a return flag, the controller (7) transfers this wager code via the playing-logic unit (8) to the recording unit (9) in order to enter in the current round protocol a mark indicative of the return of this wager to a player whose database address was entered in the protocol earlier. Concurrently, the flag  $F=0$  for the wager returning unit (19) is a confirmation of the regular wager return with a

Q12

return flag and indication of the transfer to the controller (7) of the regular wager with a return flag. [An] A player account[-register] of the player located in the long-term memory unit (14) is added with a wager return mark along with a correction of [an] the player account[-register] balance. Having received from the wager distribution processor (11) a signal F=1, after processing of the regular wager code with a return flag, the controller (7) carries the current playing round to completion in the usual fashion, while unloading the buffer storage via the

Paragraph 3, Page 24

Q13

The controller (7) sends to the processor (11) a wager information code as a set of binary number bits which enters an input of a decoder (20) containing N 1-bit outputs. An input binary number corresponds to i-number of a game set element on which a wager is placed, so that the decoder (20) sets out at its i-output on-bit leaving all remaining outputs zero. Each output of the decoder (20) is a driving input of a flip-flops (21), therefore on-bit at the i-output of the decoder sets Q output of the flip-flop (21-i) in the state Q=1. Outputs of all N flip-flops (21) are supplied to an N-input "logical AND" gate (22) at the F output of which on-bit emerges, if, and only if the processor (11) processes a wager placed on the last "unoccupied" game set element. An output of the gate (22) is supplied to reset inputs of all flip-flops (21) and also as an output of the processor (11) – to the controller (7). Thus, signal F=0 does not change the states of flip-flops (21) and serves for the controller (7) as evidence of "failure to win" of a wager processed, so that the controller (7) must proceed with the current playing round, whereas signal F=1 re-sets all flip-flops (21) to 0, thus preparing the controller (7) for wager processing in the next round, and gives instructions to the controller (7) about the current round completion.

Paragraph 5, Page 24

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Paragraph 1, Page 25

At the same time, if, depending upon the rules of a prize fund allocation to be used, the playing-logic unit (8) and the recording unit (9) need data about a precise quantitative wager distribution among the game set elements, then in order to ensure this, the wager distribution processor (11) may be [assembled] provided in accordance with [a] the particular function and logic circuit represented in FIG. 3. Here, instead of a set of flip-flops, use is made of N binary counters (23-1), ..., (23-N) with null-comparison units (24-1), ..., (24-N), wherein each 1-bit output of the decoder (20) is an input of the binary counter (23) which accumulates a number of wagers placed in the current round on a corresponding game set element. A reading of each counter (23) is supplied to an input of the null-comparison unit (24), so that if the input coincides with 0, an output of the null-comparison unit (24) is set to 1, if it does not coincide – to 0. Outputs of the comparison units (24) are supplied to a "logical AND" gate (25) with N inverse inputs, whose output F is the output of the processor (11) to the controller (7). In so doing, F=1 if, and only if the processor (11) processes a code of the wager placed on the last "unoccupied" game set element. Besides, signal F is supplied to reset inputs of the counters (23) for their re-set to an initial zero state. Thus, in case of F=0, the states of the counters (23) remain unchanged, and the controller must proceed with the current playing round. Signal F=1 re-sets all counters (23) to 0, thus preparing the processor (11) for wager processing in the next round, and serves to the controller (7) as an indication about the current round completion. To satisfy needs for full information about a current quantitative wager distribution among the game set elements, data contained in the counters (23) is transferred to the controller (7) over a data bus (26) under control of the controller (7).

Paragraph 2, Page 25

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A wager distribution processor (11) in accordance with an apparatus realizing a "Force of Minimum" game method may be [assembled] provided according to [a] the circuit depicted in FIG. 4 which is a [development] modification of the circuit of FIG. 3. Here, a binary counter (23) also corresponds to each game set element, and readings of the counter are additionally compared with 1 in a comparison unit (27). When an input binary number coincides with 1, the bit of a comparison unit (27) sets to 1, when it does not coincide – to 0. Outputs of comparison units (27) are supplied to a N-input "exclusive OR" gate (28), whose output F1 takes a value of 1 when, and only when exactly one input equals 1. Besides, outputs of all comparison units (27) are supplied to N inputs of an encoder-address former (30). Signals of null-comparison units (24) are processed, like in the scheme depicted in FIG. 3, by a "logical AND" gate (25) with N inverse inputs whose output F0 gives warning of the absence of zeroes in the wager distribution (when  $F0=1$ ) or of their presence (when  $F0=0$ ). To reveal the availability of the first nonzero global minimum in the current wager distribution, signals F0 and F1 are supplied to a two-input "logical AND" gate (29) whose output F takes a value of  $F=0$  if, and only if there is no nonzero global minimum, and a value of  $F=1$  in case of its availability. Signal F is supplied to a control input of the encoder (30), so that when F moves from the level  $F=0$  to the level  $F=1$ , the encoder (30) yields a binary number which corresponds to the number of the only nonzero input; with a reverse move, all output bits of the encoder (30) set to 0. Moreover, signal  $F=1$  re-sets the counters (23) to an initial zero state, thus preparing the processor for wager processing in the next round. Thus, emergence of signal  $F=1$  at the output of the wager distribution processor (11) is a flag for the controller (7) about the current round completion.

wherein the encoder (30) output contains a binary number of the only game set element on which a minimum number of wagers has been placed, whereas signal  $F=0$  is a flag for the controller (7) about the current round continuation. As in the scheme depicted in FIG. 3, the controller (7) is able to read data about the current wager distribution out of the data bus (26).

Paragraph 2, Page 26

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A wager distribution processor (11) in accordance with an apparatus realizing a "Force of Minimax" game method may be assembled according to a circuit depicted in FIG. 5 which is a further development of FIG. 4. Here, as in FIG. 4, an "element" counter (23) also corresponds to each game set element, however an output of every such counter is processed by three comparison units: (24), (31), and (32). The unit (24) carried out comparison with 0, the unit (31) - comparison with an output of a minimum-counter (33), the unit (32) - comparison with an output of a maximum-counter (34). Initialization of all counters is carried out by the processor's output  $F=1$  upon completion of the regular round; in so doing, all N "element" counters (23) are set to 0, a starting sum of the minimum-counter (33) is set equal to 1, that of the maximum-counter (34) is set equal to 3. Thus, in the beginning of each round the minimum-comparison unit (31) compares readings of "element" counters (23) with number 1 (a value of the first nonzero global minimum), the maximum-comparison unit (32) - with number 3 (a value of the first global maximum given a nonzero global minimum). Outputs of a null-comparison unit (24), as before, are processed by a "logical AND" gate (25) with N inverse inputs, whose output takes a value of  $F_0=1$  if there are no zeros in the wager distribution, and a value  $F_0=0$  if they are present. Outputs of the minimum-comparison unit (31) are supplied to corresponding inputs of a first encoder (30-1) and, besides, are processed by a first N-input "exclusive



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OR" gate (28-1). Outputs of the maximum-comparison unit (32) are supplied to corresponding inputs of a second encoder (30-2) and, besides, are processed by a second N-input "exclusive OR" gate (28-2). As a result, the output F1 of the first gate (28-1) takes a value of 1 if, and only if exactly one coincidence has been fixed in the minimum-comparison units (31), and the output F2 of the second gate (28-2) takes a value of 1 if, and only if exactly one coincidence has been fixed in the maximum-comparison units (32). Signals F0 and F1 are supplied to a first two-input "logical AND" gate (29-1) whose output F3 takes a value of F3=1 if there is the only nonzero minimum in the wager distribution, and a value F3=0 if it is absent. Signals F3 and F2 are supplied to inputs of a minimum-counter (33) and a maximum-counter (34) respectively, which actuate when the input moves from high bit to zero bit, supplementing an accumulated sum with 1 and thus fixing successive levels for global minimum (an output of the counter (33)) and global maximum (an output of the counter (34)). Besides, signal F3 enters a control input of the first encoder (30-1), signal F2 enters a control input of the second encoder (30-2), with a binary number emerging at their output buses when a control signal moves from zero bit to high bit, the said number corresponding to the number of the only nonzero bit at the data input;

Paragraph 2, Page 27

As a result, the wager distribution processor (11) transfers to the controller (7) as its output data a binary number at the output bus of the first encoder (30-1), a binary number at the output bus of the second encoder (30-2), a binary number at the output bus of the counter (34) and a signal-flag F. A value of the flag F=1 is an indication to the controller (7) about the current round completion; in so doing, the output of the first encoder (30-1) contains a binary number which is a defined wager distribution [global] minimum value, the output of

Q15

the second encoder (30-2) contains a binary number which is a wager distribution [global] maximum value, the output of the counter (33) contains the number of wagers placed on a global minimum, the output of the counter (34) - the number of wagers placed on a global maximum. A value of the flag F=0 is an indication to the controller about the current round continuation; in so doing, a binary number at the output bus of the counter (33) corresponds to a global minimum value to be checked, a binary number at the output bus of the counter (34) corresponds to a global maximum value to be checked, a nonzero binary number at the output bus of the first encoder (30-1) corresponds to the number of an element - a wager distribution global minimum found in the current wager distribution, a zero binary number at the output bus of the first encoder (30-1) means the absence of global minimum in the current wager distribution, a nonzero binary number at the output bus of the second encoder (30-2) corresponds to the number of an element - a wager distribution global maximum found in the current wager distribution, a zero binary number at the output bus of the second encoder (30-2) means the absence of global minimum in the current wager distribution. Moreover, as before, the controller (7) is able to read data about the current wager distribution out of the processor (11), via the data bus (26).

Paragraph 5, Page 28

Q14

Some apparatuses embodying different iterative-analytical games ("Force of Zero", "Force of Minimum", "Force of Minimax") among game sets of different power N and some slot machines and electronic cash terminals of the players' registration and wager payment may be integrated through a local computer network under control of a computer playing server into a playing system offering the players ample scope of choice in a manner that is known. Moreover, in such a system games identical by an iterative-analytical

Q14

process and power N of a game set may differ by a price of wagers to be placed. In so doing, a playing server in respect of each apparatus will act as the input/output processor (3), whereas a server database – [as] will provide the long-term memory unit (14) ([see] as shown in FIG.1).

Paragraph 6, Page 28

Before entering into the game, the player notifies the operator of the cash terminal of required personal data for registration, pays a necessary sum of the playing credit and receives from the playing terminal a registration card with a machine-readable data medium containing an individual code which is unique for each card. Concurrently, a central database of the playing system creates a personal data file of the player and his or her consolidated (for all games) [personal] player account[-register] whose number (a database [address] identifier – see above) corresponds in a one-to-one manner to an individual

Paragraph 2, Page 29

The slot machine reads out an individual code of the card to verify a personal playing balance in the database; a card holder is advised to input a personal PIN-code in order to open access to use a personal account-register of the authorized player. Following successful completion of these operations, the player from a menu proposed chooses a game type, a game set kind, one wager price, places wagers and/or forms [requests to provide him or her with information about the current state of wager drawing] which are sent by a computer server for processing in a corresponding apparatus embodying a game type chosen.

Q17

Paragraph 2, Page 31

The existing organization and technological infrastructure for the conduction of traditional national electronic lotteries which contains point[s] of sale[s] terminals for sale of numbered lottery coupons to the population (like "Lotto-Million", see above) with electronic terminals for wager registration, may be used, without substantial alterations, for the conduct of

iterative-analytical games. Minor changes will be inserted only to design and assemblage of information fields of lottery coupons in which the following elements will appear: a game type selection field, a field of the game set selection from a predetermined pool of sets and a wager assigning field (the said pool of sets may be represented by integer ranges from 0 to 9, from 10 to 99, from 100 to 999, from 1000 to 9999, etc., so that the belonging of a wager to be assigned to one of such sets is unambiguously determined by a numeric value of this wager), as well as to hardware-software of the central playing server which must be adapted to a wager registration mode with timing separation in order to form turns and supplemented with apparatuses in accordance with the present invention which embody iterative-analytical games. When providing a necessary speed of response of the central playing server and sufficient channel capacity, an electronic terminal of the point of sales of lottery coupons prints on a player's coupon during registration of his or her wager a registration data and time, a wager accounting number in the current playing round and a round number. Using this data, a player can check his or her coupon-wager against a prize later on, through a lottery information service. In case of a "Force of Zero" instantaneous lottery, the electronic terminal prints an outcome on a player's coupon right after a wager has been read from the coupon and registered by the central server in a corresponding apparatus in accordance with the present invention which embodies a selected game.

Paragraph 3, Page 31

To simplify operations concerning the award of prizes and technical realization of the procedures for wager registration in a real time mode, national electronic iterative-analytical lottery games may be conducted according to a multilevel hierarchical scheme of connecting the playing servers, where each level corresponds to a certain range of power  $N$  of game

Q17

sets, so that, for example,  $N < 100$  games are processed by servers covering territories with population up to 20-30 thousand people,  $N < 1000$  games - by servers covering territories with population up to 100-150 thousand people,  $N < 10,000$  games - by servers covering territories with population up to 1.5-3.0 million people, etc. Provision of electron wager registration terminals in the point of sale[s of] terminals for selling lottery coupons with the screens to display the current playing round state enables realization of a full-value

Paragraph 3, Page 36

Q18

[Interaction] iteration-analytical games as one of applications of electronic payment systems through debit, credit and smart cards, due to their playing interest and sporting competitive strength of the interactive mode, constitute a promising direction in the development of national and municipal electronic lotteries to draw the interest of vast masses of the population.